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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,016	09/18/2006	Landon C.G. Miller	TRB-10302/38	3156
25006 7590 10/01/2009 GIFTORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021				
EXAMINER SZMAL, BRIAN SCOTT				
ART UNIT		PAPER NUMBER		
3736				
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10/01/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/599,016

**Applicant(s)**

MILLER, LANDON C.G.

**Examiner**

BRIAN SZMAL

**Art Unit**

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Priority***

1. Receipt is acknowledged of a certified copy of the PCT application referred to in the oath or declaration or in an application data sheet. If this copy is being filed to obtain the benefits of the foreign filing date under 35 U.S.C. 119(a)-(d), applicant should also file a claim for such priority as required by 35 U.S.C. 119(b). If the application being examined is an original application filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. See 37 CFR 1.55(a)(1)(i). If the application being examined has entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and Regulations of the PCT. See 37 CFR 1.55(a)(1)(ii). Any claim for priority under 35 U.S.C. 119(a)-(d) or (f) or 365(a) or (b) not presented within the time period set forth in 37 CFR 1.55(a)(1) is considered to have been waived. If a claim for foreign priority is presented after the time period set forth in 37 CFR 1.55(a)(1), the claim may be accepted if the claim properly identifies the prior foreign application and is accompanied by a grantable petition to accept an unintentionally delayed claim for priority. See 37 CFR 1.55(c).

***Claim Rejections - 35 USC § 112***

2. Claims 1, 3-10, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: The computing device and the biochemical analyzer do not interact with one another, nor is there any claimed means for interacting with one another. Furthermore, the claim lacks any structural relationship between the display and the computing device and biochemical analyzer. For the purposes of examination, the claim is being interpreted as having three separate elements, a computing device, a biochemical analyzer and a display.
4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: a step involving how the biochemical analyzer interacts with the neural conductivity measuring means as well as how it is used to indicate neurological injury in conjunction with the neural conductivity measuring means. For the purposes of examination, the claim is being interpreted as detecting neural conductivity and using a biochemical analyzer to measure chemicals from a blood sample to detect a neurological injury.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gozani et al (2002/0183647 A1) in view of Cameron, Sr. et al (5,364,793).

Gozani et al disclose a means for measuring nerve responses from stimulated tissue and further disclose a computing device comprising at least one signal emitter attachable to a first position on the subject to emit an electrical signal such that the electrical signal is communicated to a nerve in proximity to the first position; at least one signal detector attachable to the second position on the subject to detect the electrical signal transmitted by the nerve; a processor for comparing a threshold reference value with the detected electrical signal and indicating neurological injury when the detected electrical signal is beyond a preselected range of the reference value; a display for providing indication of neurological injury; a database comprised of signal strengths for various positions and muscle groups of the subject; the computing device provides a user with instructions for positioning the emitter and the detector on the subject; a wireless transmitter coupled to the computing device; a user interface for data input to the computing device; and an ancillary monitoring device providing the computing device with an input relating to a physiological parameter of the subject. See Paragraphs 0002, 0004, 0031, 0036, 0037, 0039-0041, 0043, 0049, 0050 and 0053.

Gozani et al however fail to disclose a biochemical analyzer sampling a biological fluid from the subject for the presence of chemical species or concentrations indicative of neurological injury.

Cameron, Sr. et al disclose a means of diagnosing peripheral nerve damage and further disclose a biochemical analyzer sampling a biological fluid from the subject for the presence of chemical species or concentrations indicative of neurological injury. See Abstract.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means of Gozani et al to include the use of a biochemical analysis of a blood sample to detect the presence of a neurological injury, as per the teachings of Cameron, Sr. et al, since it would provide an additional analysis means for further confirming the presence of an injury in conjunction with a nerve analysis means.

7. Claims 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gozani et al (2002/0183647 A1) and Cameron, Sr. et al (5,364,793) as applied to claims 1 and 10 above, and further in view of Hartaub et al (2001/0037083 A1).

Gozani et al and Cameron, Sr. et al, as discussed above, disclose means for detecting the presence of a neurological injury but fail to disclose suggesting a pharmaceutical treatment protocol for the subject; and neurologically active pharmaceuticals and a means for introducing a pharmaceutical into the person.

Hartaub et al disclose a means for controlling drug therapy dosages and further disclose suggesting a pharmaceutical treatment protocol for the subject; and

neurologically active pharmaceuticals and a means for introducing a pharmaceutical into the person (morphine is considered to be a neurologically active drug since the drug impedes pain detection, and the infusion pump is a means for introducing the drug into the body). See Paragraphs 0021 and 0037.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Gozani et al and Cameron, Sr. et al to include a means for suggesting drug treatment for the subject, as per the teachings of Hartaub et al, since it would provide a means of possible drug treatments in response to an indication of an injury.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN SZMAL whose telephone number is (571)272-4733. The examiner can normally be reached on Monday-Friday, with second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian Szmal/  
Examiner, Art Unit 3736